

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A data transmitting method of transmitting data from a first node to a second node through a router, comprising the steps of:

storing a node identifier of each node and a home prefix indicating a sub-net to which the node is usually connected, in connection with a host name of the node;

reading a node identifier corresponding to a host name of the second node input and the home prefix of the second node;

generating an IP address having the node identifier and home prefix which have been read;

generating a data packet having the IP address generated;

transmitting the data packet to the router of the sub-net to which the second node is usually connected, in accordance with the IP address;

adding a header indicating a location to which the second node has moved, to the data packet transmitted to the router, on the basis of cache information held by the router to manage the second node; and

transmitting the data packet to the second node on the basis of the header added to the data packet.

2. (original) A data transmitting method according to claim 1, characterized in that the node identifier corresponding to the host name of the second node input and the home prefix of the second node are read by using an application program.

3. (original) A data transmitting method according to claim 1, characterized in that an application program reads the node identifier corresponding to the host name of the second node input, and a network layer reads the home prefix relating to the node identifier read.